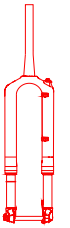
BRAIN

ROCK SHOX

FRONT SUSPENSION TUNING GUIDE

ROCKSHOX RS-1 BRAIN



CONTENTS

INTRODUCTION **2**
SERVICE AND MODIFICATIONS 2
BRAIN TECHNOLOGY **2**
PERFORMANCE TUNING **3**
1. SETTING AIR PRESSURE AND SAG 4
2. ADJUSTING REBOUND DAMPING 5
3. ADJUSTING COMPRESSION DAMPING (BRAIN FADE) 5
ADDITIONAL INFORMATION **5**

Please note all instructions are subject to change and updates without notice.
Please visit www.specialized.com for periodic tech updates.
0000040607_TG R1, 06/14

INTRODUCTION

Your bike is equipped with a RockShox RS-1 Brain fork, featuring Specialized Brain technology. Please read this Tuning Guide as well as RockShox RS-1 User Manual in its entirety for proper setup and service before riding. Please contact Specialized at (877) 808-8154 or RockShox at (800) 346-2928 for further information or questions, and visit www.specialized.com or www.rockshox.com for periodic updates.

Make sure that you review and understand the warnings, instructions, and content of your bicycle manuals.

SERVICE AND MODIFICATIONS

As a first point of contact for all warranty or service issues, please refer to your local Authorized Specialized Dealer or RockShox Authorized Dealer. **All maintenance of the Brain damper must be performed by a Authorized Specialized Service Center. Please visit www.specialized.com for a list of Authorized Specialized Dealers, which is the point of contact for sending product to the Authorized Specialized Service Center.**

BRAIN TECHNOLOGY

BRAIN: Inertia valve platform that supports the fork and distinguishes between terrain- or rider weight-induced events. This provides two distinct compression damping rates: one to react to terrain and the other to support the rider.

BRAIN FADE: Fluid bypass circuit that allows the rider to modulate the firmness of the Inertia Valve (IV), and allows the rider to select between a firmer or softer platform. Compression damping is also reduced as the fluid bypass is increased.

PERFORMANCE TUNING

RockShox forks can be tuned for your particular weight, riding style and terrain. When tuning your fork, always tune in the following order:

1. Sag (spring rate tuning)
2. Rebound damping (gray Rebound adjuster)
3. Brain Fade compression damping (black Brain adjuster)

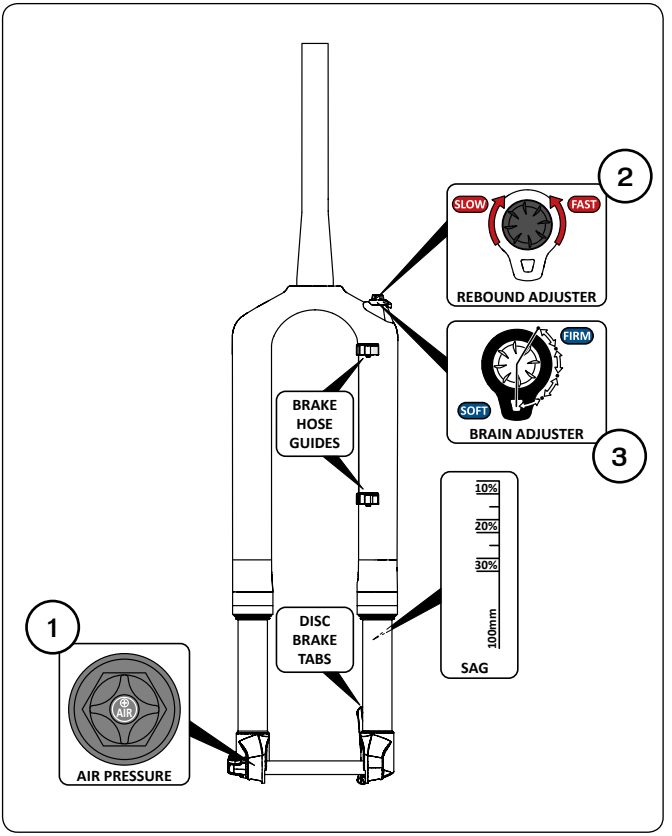


Fig. 1

1. SETTING AIR PRESSURE AND SAG

The RockShox RS-1 Solo Air forks have an adjustable positive air chamber. The air pressure in the chamber determines the amount of force required to compress your fork.

- More air pressure will result in less suspension sag and increase the force required to bottom out the fork.
- Less air pressure will result in more suspension sag and reduce the force required to bottom out the fork.

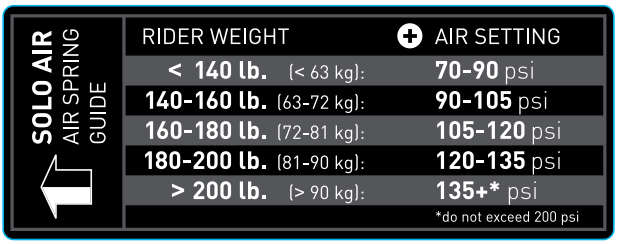
Sag is the amount the fork compresses from your weight and riding gear when sitting on the bike. Proper sag adjustment enhances the ability of the front wheel to follow the contour of the terrain as you ride.

Measuring Sag:

- Verify that the Brain Fade is at full soft by turning the Brain adjuster (located at the top of the non-drive-side fork leg) fully clockwise (see Fig.1).
- Move the travel indicator o-ring up against the wiper seal of the carbon upper, located on the non-drive-side leg.
- Sit on the bike with your normal riding gear.
- Carefully step off, biasing your weight towards the rear of the bike, and measure the distance between the o-ring and wiper (or, if applicable, check the location of the travel indicator o-ring against the sag value gradients marked on the lower tube). This is your sag. Sag should be between 15 and 20 percent of maximum travel (100mm for the RS-1 with Brain).
- If you are unable to achieve proper sag, you might need to change the fork's air pressure, as described above. Use the additional information to assist in the proper setup of your fork.

Setting Air Pressure:

- Remove the air cap on the air valve located on the bottom of the drive-side lower tube.
- Refer to the air chart on the fork leg for recommended air pressure settings (shown below). The air pressure settings are intended as a **starting point only**. Inflate the air chamber to the desired pressure using a shock pump, and then adjust according to riding style and terrain.



2. ADJUSTING REBOUND DAMPING

The gray knob at the top of the non-drive-side fork leg controls the rebound damping, the rate at which the fork returns after the fork has been compressed.

- Turn the knob clockwise for slower rebound (slower speeds, bigger hits).
- Turn the knob counter-clockwise for faster rebound (higher speeds, small bumps) and more traction.

NOTE: Ensure that the Brain adjuster does not turn when turning the rebound knob.

3. ADJUSTING COMPRESSION DAMPING (BRAIN FADE)

The black Brain adjuster at the top of the non-drive-side fork leg, under the rebound knob, adjusts compression (Brain Fade). The Brain adjuster has five positions (four clicks) of adjustment.

It is recommended that a rider start with the Brain adjuster in the middle of the adjustment range for the first ride, which is two clicks clockwise from full firm (or two clicks counter-clockwise from full soft) . After the initial break-in period (approximately 1 to 2 hours of riding), the rider should pay attention to how the suspension is working during normal and hard pedaling. If the suspension movement is excessive, turn the Brain adjuster counter-clockwise (firmer) until these rider inputs are controlled.

- Turn the lever counter-clockwise for a firmer ride. Full counter-clockwise is the maximum firm compression damping setting.
- Turn the lever clockwise for a softer setting.

NOTE: The rebound knob will turn when adjusting the Brain adjuster. This is by design; there is no need to turn the rebound knob back to its original position.

ADDITIONAL INFORMATION

The RS-1 is equipped with brake hose guides on the non-drive-side carbon upper–no need for zip ties. When installing your front brake, be sure to route your cable housing (or hose) on the inside of the carbon upper after it exits the lower cable housing guide.

For fork setup information, please visit www.rockshox.com. For Brain-specific information, visit www.specialized.com.

SPECIALIZED BICYCLE COMPONENTS
15130 Concord Circle, Morgan Hill, CA 95037 (408) 779-6229
www.specialized.com